

- 11 -

REMARKS

Claims 1 to 24 are pending. Claims 21 to 25 are new and no claims are allowed.

1. Claims 1 to 20 are rejected under 35 USC 102(b) as being anticipated by Horton et al. (U.S. Patent No. 5,598,916). Horton et al. describe modular conveyor belt links having sets 26, 27 of interdigitated link ends disposed on opposite ends of the modules. Respective sets of apertures 24, 25 receive a pivot rod 23 for connecting adjacent modules together to form the conveyor belt. The particular focus of this patent, however, is structure for retaining headless pivot rods within the outer edges of the modular plastic link belt (Column 2, lines 33 to 35).

The Examiner points to Figs. 3 and 3A as showing an "intermediate section comprises a web portion (Fig. 3, EX 1, labeled by examiner)" and "wherein the web portion extends across the width between the first and second walls from one of the upper and lower surfaces to a portion of the way through the thickness of the intermediate section to form into a corrugated portion (Fig. 3, EX, labeled by examiner) having a series of regularly spaced apart grooves".

Independent claims 1, 7 and 14 have been amended to set forth that the corrugated portion "has a sinusoidal shape comprising a series of regularly spaced ridges and valleys". Support for this amendment is found in the specification at page 3, lines 13 to 31, page 6, lines 4 to 14 and page 7, lines 19 to 24. The provision of a sinusoidal intermediate portion comprising a series of regularly spaced ridges and valleys provides the module having a plurality of first link ends connected to each ridge along the first wall of the intermediate section and a plurality of second link ends connected to each ridge along the second wall of the intermediate section. The

A

benefit of such a construction for a conveyor belt module is set forth at page 4, lines 8 to 16. There it is described that the corrugated strip forms a series of arched recesses that are large enough to provide room for a link end of an interlinked module of a row to collapse into the recess or to rotate as the belt rows fan out going around a turn. This structure is the subject of U.S. Patent No. 5,372,248 to Horton, which is referenced at page 2 of the specification. Thus, the provision of regularly spaced ridges and valleys in an intermediate section having a sinusoidal shape provides a module for a modular conveyor belt with increased turning capability.

However, as described at page 2 of the Applicant's specification with respect to the '248 patent to Horton, this prior art module can experience lateral compression as the conveyor belt rounds a turn. The provision of an intermediate web in conjunction with the sinusoidal intermediate section solves this problem.

The problem with the cited Horton et al. patent is that it does not include a corrugated portion having "a sinusoidal shape comprising a series of regularly spaced ridges and valleys". While the Examiner has cited Figs. 3 and 3A of Horton et al. against the presently pending claims, the Applicant believes that a better and more clearly understood view of the prior art module comprising an intermediate section having opposed first and second link ends resides in Fig. 2. This figure shows the leg portions for two adjacent first link ends 26 and one opposite link end 27 having a Y-shaped structure. The prongs of the Y support two first link ends 26 while the stem of the Y supports one oppositely directed second link end. Admittedly, the crook between the two prongs of the Y has a curved surface. The Horton et al. module is constructed of a plurality of these Y-shaped support structures, alternating from one to the other with the two prongs pointing in a first direction and then in a second,

A

opposite direction. The intermediate section between immediately adjacent and oppositely directed Y-shaped supports is a connecting member as a web devoid of a sinusoidal shape and having neither ridges or valleys. Thus, a conveyor belt of interdigitated modules accordingly to the cited Horton et al. patent would not necessarily suffer from compression as it rounded a turn. However, such a conveyor belt also would not necessarily be able to round as tight a turn as a conveyor belt of radius modules of the type shown in the prior art '248 patent to Horton, and of the type that appear to be shown in Figs. 1, 1A and 1B of the cited Horton et al. patent, but not referenced by the Examiner against the pending claims.

Thus, it is the Applicant's position that amended independent claims 1, 7 and 14 calling for a "corrugated portion [having] a sinusoidal shape comprising a series of regularly spaced ridges and valleys" is neither taught by the cited Horton et al. patent, nor would it have been obvious to one skilled in the art at the time of the Applicant's invention. Accordingly, these independent claims are believed to be patentable over the cited prior art. Claims 2 to 6, 8 to 13 and 15 to 24 are believed to be patentable as hinging from allowable base claims.

Reconsideration of this rejection is requested.

2. New independent claim 25 is similar in scope to amended independent claim 1 in the sense of the corrugated portion having a sinusoidal shape comprising a series of regularly spaced ridges and valleys extending substantially across a lateral width of the module. In that respect, it is believed to be patentable over Horton et al. for similar reasons as set forth above in section 1 of this amendment. However, this claim calls for the first and second plurality of link ends extending outwardly from at least the respective regularly spaced ridges of the corrugated portion.

A

3. Figs. 12 and 13 have been amended to indicate the openings 331. Approval of these charges is requested.

4. Replacement pages 5, 7 and 9 to 11 and a clean copy of the pending claims is attached to this amendment.

It is believed that claims 1 to 25 are now in condition for allowance. Notice of Allowance is requested.

Respectfully submitted,

By



Michael F. Scalise  
Reg. No. 34,920

Hodgson Russ LLP  
One M&T Plaza, Suite 2000  
Buffalo, New York 14203  
(716) 856-4000

August 21, 2001

A